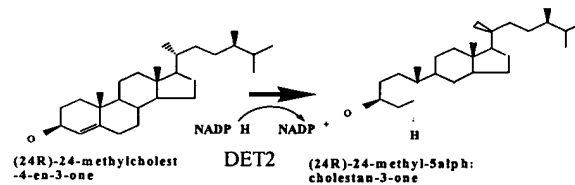


*Figure 1. The 3-oxo-5- $\alpha$ -steroid 4-dehydrogenase (DET2) reaction.*

**Pathway:**



**Substrate:**

(24R)-24-methylcholest-4-en-3-one

**Product:**

(24R)-24-methyl-5 $\alpha$ -cholestan-3-one

**Function:**

The DET2 enzyme (an NADPH-dependent enzyme) is involved in the conversion of (24R)-24-methylcholest-4-en-3-one to (24R)-24-methyl-5 $\alpha$ -cholestan-3-one. This reaction is part of the biosynthetic pathway of the brassinosteroids.